

MEDICAL WASTE GENERATOR REQUIREMENTS

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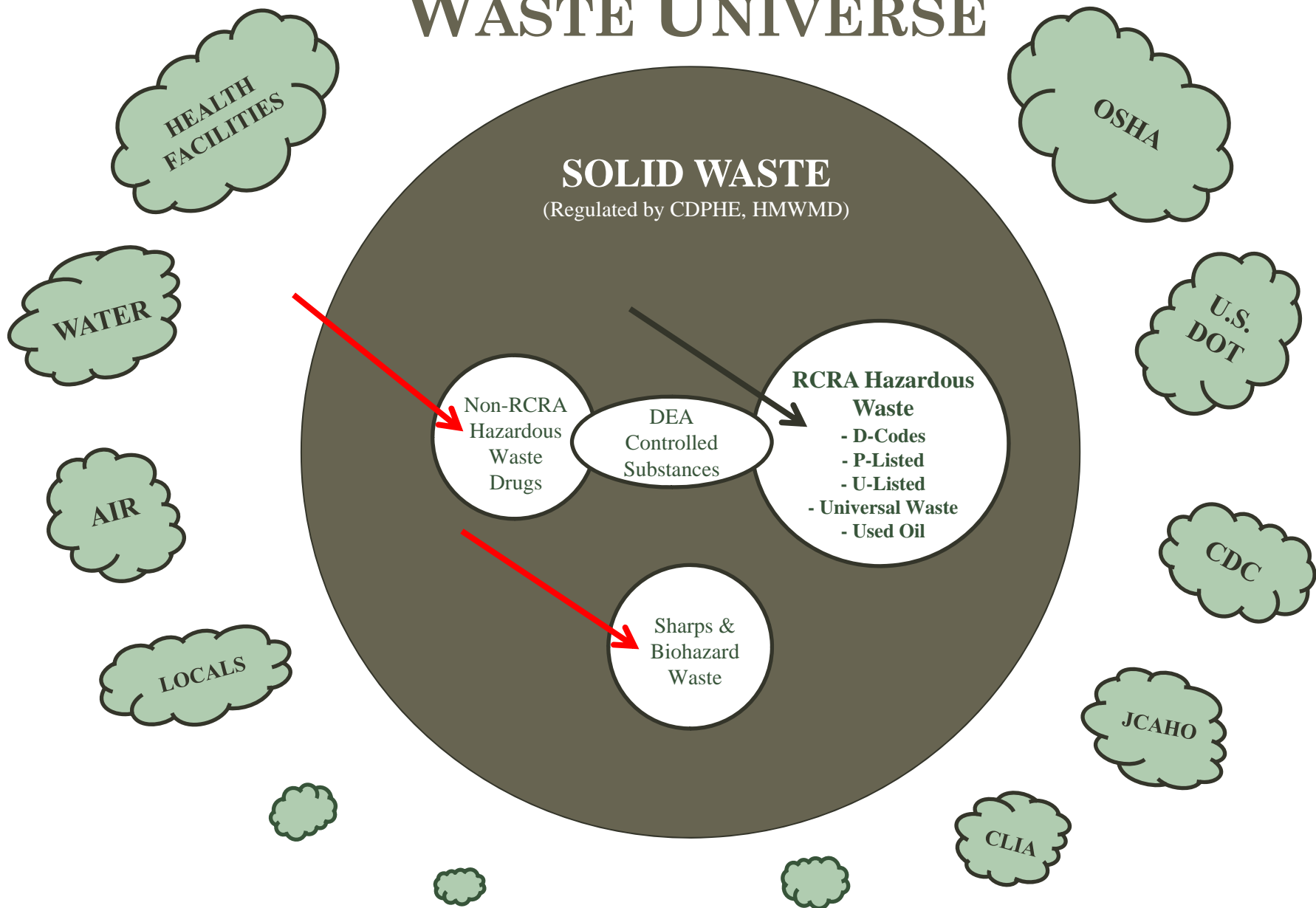
<http://www.colorado.gov/cdphe/medicalwaste>

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Colorado Department
of Public Health
and Environment

WASTE UNIVERSE



WHAT IS MEDICAL WASTE?

- Any infectious, pharmaceutical or trace chemotherapy waste
 - Generated in a health care setting in the diagnosis, treatment, immunization or care of humans or animals
 - Generated in autopsy or during preparation of a body for final disposition
 - Generated in research involving biologicals or pathogens
 - Related to accident, suicide or other physical trauma

MEDICAL WASTE IS NOT:

- Fluids, tissues or body parts that are:
 - Removed for the purposes of donation, research or other use
 - Returned to the person from whom they were removed as long as the material is rendered safe for handling



MEDICAL WASTE IS NOT

- Medications that are:
 - Donated by a patient or resident to a health care facility for reuse [6 CCR 1011-1 Chap II, Section 7.200 et. seq.]
 - Donated to the Cancer Drug Repository Program [6 CCR 1015-10]
- RCRA hazardous waste pharmaceuticals



MEDICAL WASTE IS NOT:

- Lightly to moderately contaminated bandages, garments or disposable bedding
 - Not capable of releasing liquid or caked-on blood, body fluids, tissue or other potentially infectious material during handling or storage
- Contaminated or adulterated food or processed food items that can or have caused illness / death



HOUSEHOLD MEDICAL WASTE

- Household medical waste generators are exempt
 - Advised to follow best management practices
- Community collection programs must meet generator, transport and disposal requirements



CATEGORIES OF MEDICAL WASTE

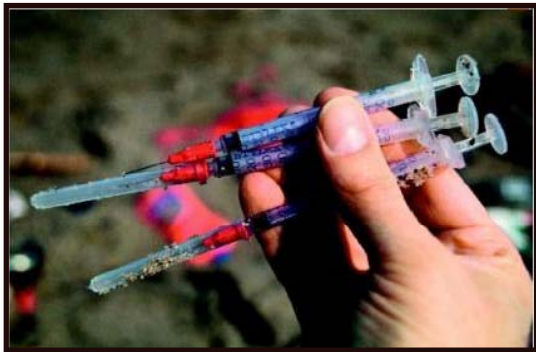
- Infectious Waste

- Sharps
- Blood and body fluids
- Pathological waste
- Potentially infectious waste
- Other as determined by the Department

- Non-RCRA waste pharmaceuticals and trace chemotherapy waste

SHARPS

- Any discarded article that may purposely or accidentally puncture or cut the skin or mucosa
 - Hypodermic needles and scalpel blades
 - Syringes or tubing with attached needle
 - Lancets, blood vials, suture needles
 - Culture tubes and broken culture dishes
 - Tattoo pens



BLOOD AND BODY FLUIDS

- Waste unabsorbed human and animal blood or blood products, components of blood or blood products, and other body fluids
 - Blood, plasma, serum, platelets, pleural fluid, synovial fluid, pericardial fluid, peritoneal fluid
 - Suction and irrigation fluids
 - Liquid residues or contaminated water resulting from cleanup of medical waste spill
- Not urine, feces, saliva, nasal secretions or vomitus unless visible blood is present



PATHOLOGICAL WASTE

- Tissues, organs, limbs, products of conception and other body parts removed during medical procedures
- Animal tissue exposed to infectious substances during research or contaminated with infectious substances known to be contagious to humans



POTENTIALLY INFECTIOUS WASTE

- Wastes known or suspected to be contaminated with a transmissible infectious agent
 - Cultures and stocks, drainage sets, dialysis wastes, IV bags and tubing containing blood (w/o needle), biohazardous waste
 - Items capable of releasing blood, body fluids or tissue in any form during handling or storage
 - Isolation wastes



RADIOACTIVE WASTE

- Low level radioactive wastes
 - Administering radiopharmaceuticals
 - Performing nuclear medicine procedures
 - Using radioactive traces in diagnostic procedures or medical research



WHAT IS A MEDICAL WASTE GENERATOR?

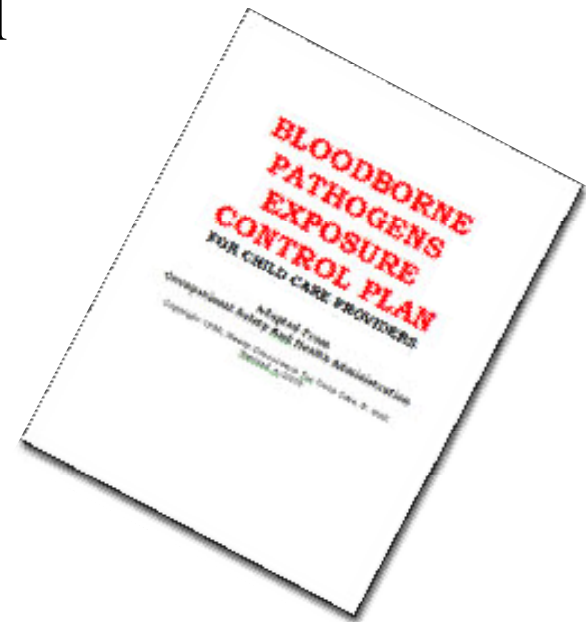
- Person whose act or process produces medical waste
 - Individuals
 - Partnerships
 - Corporations, firms, boards

- Examples
 - Health care facilities like hospitals, clinics, etc.
 - Flu shot clinics and health fairs
 - Funeral homes
 - Body art and acupuncture facilities



MEDICAL WASTE MANAGEMENT PLAN

- Each generator is required to have a plan
 - Maintained at the facility
 - One for each facility
 - Specific to wastes generated
 - Not submitted to CDPHE unless requested
- Plans developed for other purposes will suffice if also contain required Medical Waste Management Plan elements



PLAN COMPONENTS

1. Designation of medical waste – at point of generation
2. Provisions for the handling, treatment and disposal of medical waste
3. Contingency plan for spills or loss of containment
4. Staff training appropriate to job duties; initial and ongoing
5. Designation of a person responsible for plan implementation



ONSITE HANDLING

- Accumulate onsite w/out permit if packaged to meet US DOT requirements
 - Wastes containing organic matter up to 30 days
 - Wastes containing organic matter up to 90 days if refrigerated or frozen
 - Sharps, pharmaceuticals and trace chemo up to 90 days once container taken out of service and secured
 - If nuisance condition develops, must immediately refrigerate, freeze, treat or dispose offsite
- Otherwise a Solid Waste permit is required

ACCUMULATION AND STORAGE AREA

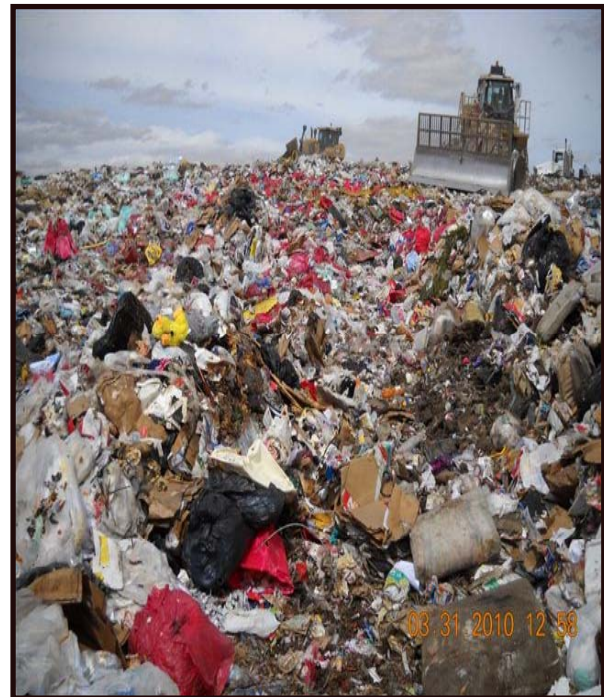
- Inside or outside
- Enclosed and inaccessible to animals and pests
- Constructed of easily cleanable materials
- Secured and have warning signs to prevent unauthorized access
- Tracking mechanism to document compliance with accumulation time limits

INFECTIOUS WASTE TREATMENT

- Can occur on-site or off-site
 - No permit for on-site treatment of own waste
 - Need written standard operating procedures for treatment method(s) used
 - Off-site treatment facilities must have permit
- Infectious waste must be treated to achieve at least a 99.99% reduction in certain *Bacillus* endospores and at least a 99.9999% reduction in *Mycobacterium phlei* or *bovis*
- Must demonstrate treatment effectiveness using biological indicators or parametric monitoring

DISPOSAL OF INFECTIOUS WASTE

- Discharge of liquids to sewer only if in compliance with waste water treatment plant requirements
- Untreated infectious waste can be disposed of in solid waste landfill only if facility is specifically approved
- Treated infectious waste can be disposed of as ordinary solid waste if it is clearly identified as “treated”



PHARMA / TRACE CHEMO TREATMENT

- Can occur on-site or off-site
 - No permit for on-site treatment of own waste
 - Need written standard operating procedures for treatment method(s) used
 - Off-site treatment facilities must have permit
- Can be incinerated, encapsulated, stabilized or other approved method



INCINERATION

- Pharmacological and trace chemotherapeutic waste are generally shipped out of state to medical waste incinerators for disposal
- Autoclaving is not appropriate

ENCAPSULATION

- Encapsulation means coating the surface of the waste with material to substantially reduce the possibility of leaching into the environment; also renders the waste safe and unusable
- Materials that may be used to encapsulate non-RCRA waste pharmaceuticals include resins or plastics

STABILIZATION

- Stabilization means surrounding the waste with a matrix that will solidify and significantly reduce the possibility of leaching into the environment: also renders the waste safe and unusable
- Common materials used to stabilize non-RCRA waste pharmaceuticals include cement, cement kiln dust and fly ash

DISPOSAL OF NON-RCRA PHARMACEUTICALS

- Acceptable disposal options include:
 - Reverse distributor
 - Mail-back service for proper disposal
 - Disposal of treated waste at an approved facility
 - Incineration at an approved facility
 - Disposal at a solid waste disposal site specifically approved for the waste

RECORDKEEPING

- Copy of plan must be kept at the facility
 - Should be reviewed annually
 - Must be updated whenever changes occur
- Records related to medical waste management should be kept at the facility for at least three years
 - Waste accumulation logs
 - Shipping papers or manifests
 - On-site treatment logs
 - Training plans and rosters





MEDICAL WASTE GENERATOR REQUIREMENTS

<http://www.colorado.gov/cdphe/medicalwaste>

Customer Technical Assistance Line:

Local: 303-692-3320

Toll-free: 1-888-569-1831, ext. 3320)

Monday through Friday | 8:00 a.m. to noon